Ayd Mill Road Presentation

Monday, April 6, 2020

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Agenda

- Welcome
- Purpose of Presentation
- Recap: 3 Lane Design Recommendation
- What We Heard: Summary of Your Feedback
- Traffic Modeling
- Traffic Mitigation Toolbox
- Next Steps



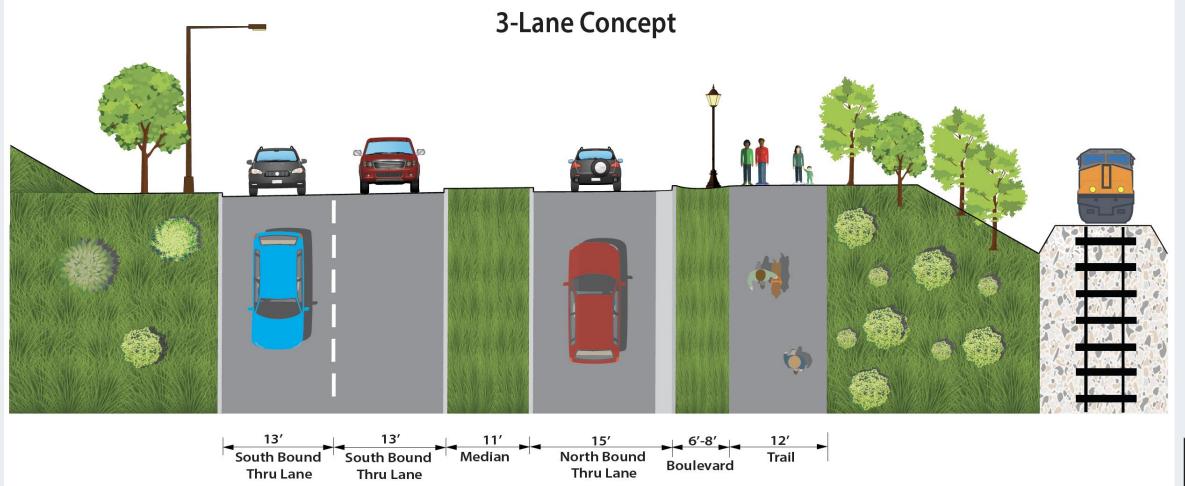
Purpose of Presentation

- Summarize Survey Results From Our First Presentation
 - Answers to Our Survey Questions
 - Summary of Other Comments

- Traffic Modeling and Analysis
 - Review Projected Traffic Operations on Ayd Mill Road
 - Review Projected Vehicle Volumes on Adjacent Roadways
 - Review Possible Mitigation Strategies
- Summarize the Final Recommendation from Public Works



Recap: 3 Lane Design Recommendation





Why 3 Lane Design is Recommended

- Estimated Cost = \$7.5 million
 - Lower cost than 2 lane configuration
- 2 south bound & 1 north bound Southbound has majority of on and off ramps
- Significant safety improvement over 2 lane proposal because 3 lane configuration maintains a median to separate southbound and northbound vehicles, reducing the potential for head-on vehicle crashes
- Safety prioritized for pedestrians, bikes, and vehicles at all access points
 - Northbound lane access maintained
 - Trail access added at intersections



3 Lane Intersection Design: Grand Avenue Looking North





3 Lane Intersection Design: Grand Avenue Looking North





3 Lane Intersection Design: Jefferson Avenue





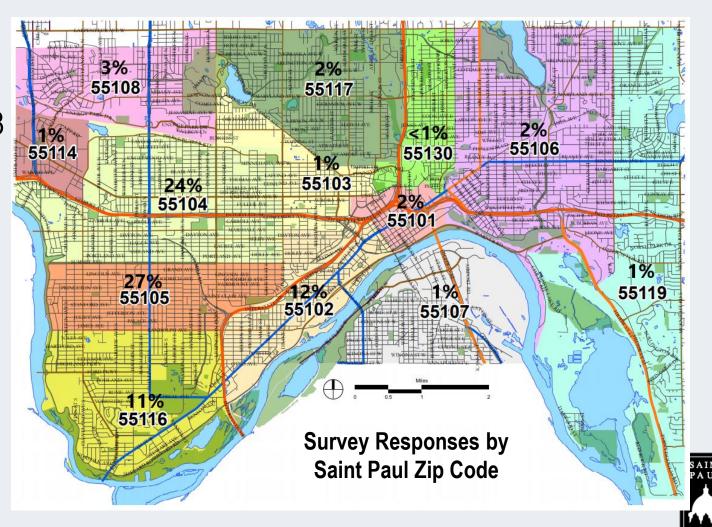
What We Heard: Summary of Your Feedback

Overall Numbers

- Views of video presentation: 1,778
- Responses to survey: 1,138

Who Responded

- 88% live in Saint Paul
- 12% from outside Saint Paul



Please share why the City's investment in Ayd Mill Road is important to you?

- ~36% Use Ayd Mill Road regularly as part of commute or to access Saint Paul locations such as businesses
- ~32% Support multi-modal use of Ayd Mill Road and would like a trail for people and bikes that connects to other infrastructure
- ~19% Ayd Mill Road is an important vehicle connector to I-35E and I-94 and it helps reduce traffic on other streets
- ~14% **Improve** road condition
- ~13% Live near Ayd Mill Road or ~10% in Saint Paul



Complete this sentence: When it comes to Ayd Mill Road, I think it's important for the City to consider...

- ~30% Multi-modal options for Ayd Mill Road
- ~17% Impact of reducing vehicle lanes of traffic on Ayd Mill Road and surrounding streets
- ~15% **Drivers**, including commuters, who currently use Ayd Mill Road
- ~11% **Repairing** the roadway
- ~10% Cost to repair and change Ayd Mill Road, including future maintenance costs
- ~9% Keeping 4 lanes of vehicle traffic



Complete this sentence: When it comes to the 3-lane proposal for Ayd Mill Road, I like...

- ~32% **Trail** for pedestrians and bikes
- ~30% **Nothing** about 3-lane proposal; repair the road and keep 4 lanes
- ~17% Safety features including barrier between north and south lanes and separation of trail from vehicles
- ~9% Lower cost for 3-lane proposal than 2-lane option
- ~7% Compromise that serves all modes of transportation



Complete this sentence: When it comes to the 3-lane proposal for Ayd Mill Road, I am concerned about...

- ~21% Increased traffic congestion on Ayd Mill Road, especially northbound with 1 lane and on area streets
 - ~12% Northbound being 1 lane
- ~13% Spending money on Ayd Mill Road versus other streets or other City priorities
- ~21% **Safety**, including speed of traffic, space/barrier between trail and vehicles
- ~7% **Access** to the trail and northbound lane; how and where will people enter and exit the trail and northbound lane



My questions about the 3-lane proposal for Ayd Mill Road are:

- How will the proposed plan affect neighborhood traffic?
- What are the specific on/off vehicle/bike/pedestrian facilities, especially at Selby?
- Why is there not a direct link to I-94? Why wasn't the original plan for the I-35E to I-94 route implemented?
- Why wasn't this road maintained/redone a long time ago?
- What are the long-term maintenance costs of the proposal? Can maintenance costs be reduced?
- Will speed limits be reduced?
- How long will the mill and overlay last? Should a complete rebuild be done?
- What park/pedestrian/beautification facilities will be added? Will solar/wind be used for lighting?
- Why can't this just be turned back to nature?



Summary of Your Feedback: Question 6 & Other Comments

Is there anything else you would like to share about Ayd Mill Road?

- Close Ayd Mill Road to all motorized vehicles
- Climate impact of motorized vehicles; reduction of traffic lanes has an environmental impact
- Share costs of road with suburban users
 - Make Ayd Mill Road a toll road
 - Transfer ownership to MnDOT or Ramsey County
- Only commuters driving through Saint Paul use Ayd Mill Road
- Concerns about Selby off ramp and traffic at Selby and Snelling
- Connect the trail to the Minneapolis Midtown Greenway
- Make this a transit corridor light rail, trolley, bus
- This needs to happen now
- Concerns about construction impacts and closure of Ayd Mill Road during construction
- Add trees and landscaping
- Ayd Mill Road is important during events that close other roads in the area



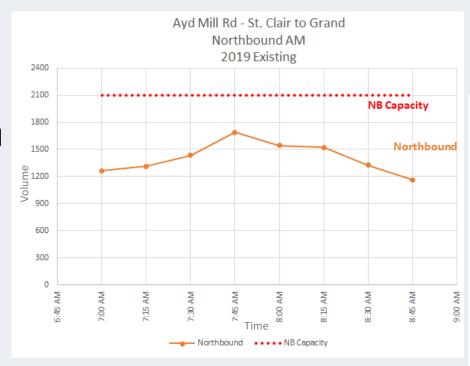
Traffic Modeling

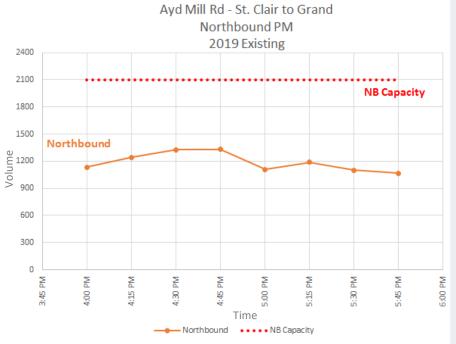
Traffic Operations, Travel Patterns, Traffic Diversion & Event Traffic



Existing Traffic Operations – Northbound

- Vehicle data collected in 2019 (May and September)
- Pedestrian data estimates based on 2018 counts on Shepard Road
- Northbound traffic does not exceed the capacity of the road
- Northbound (NB) has acceptable operations at the signalized intersections throughout the day
- Back-ups are often experienced downstream at signalized intersections along Snelling Avenue

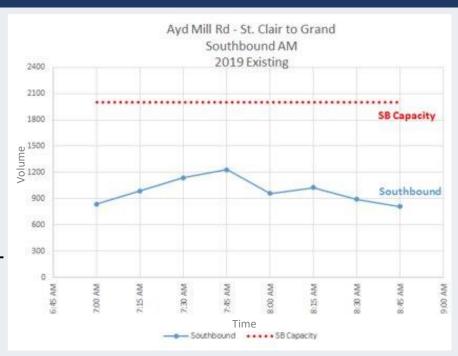


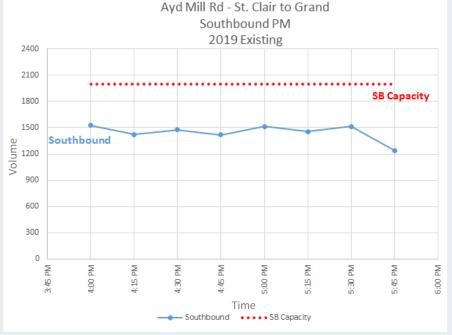




Existing Traffic Operations – Southbound

- Southbound (SB) traffic does not exceed the capacity of the road
- Southbound has acceptable operations at the signalized intersections throughout the day
- Southbound can experience backups entering I-35E in the PM rush hour
- Back-ups are often experienced upstream at signalized intersections along Snelling Avenue

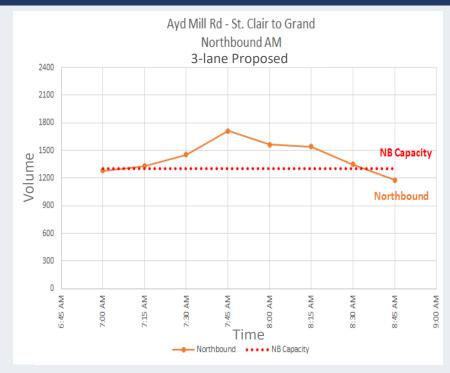


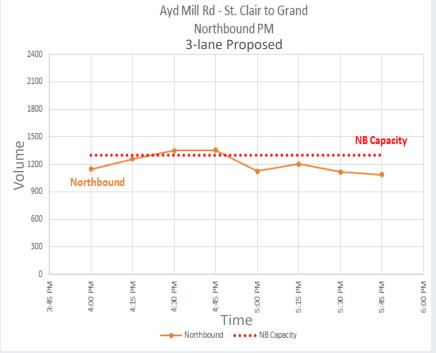




Proposed Traffic Operations – Northbound

- Northbound (NB) capacity is reduced from existing capacity due to the reduction in lanes from 2 lanes to 1 lane
- Some northbound congestion is anticipated at St. Clair. It is anticipated to be primarily limited to the AM rush hour

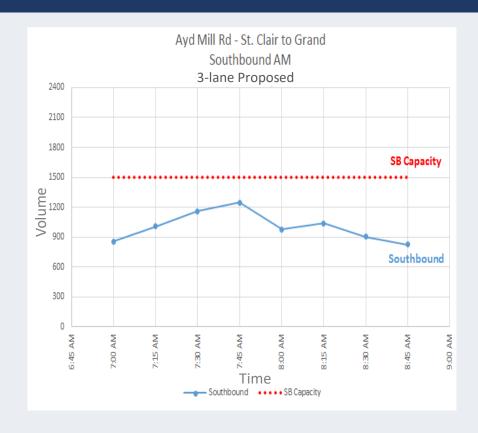


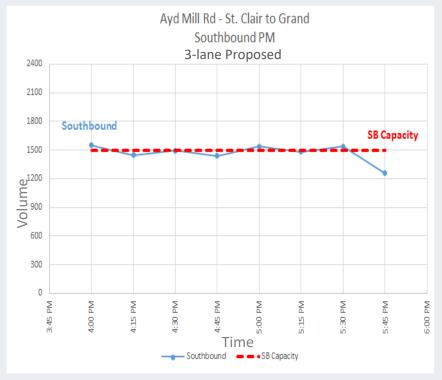




Proposed Traffic Operations – Southbound

- Southbound (SB) capacity is reduced from existing capacity due to additional delays caused by pedestrian crossings at intersections and the addition of an Eastbound left turn at Ashland
- Southbound has acceptable traffic operations at all times of the day







Potential Traffic Diversion Volumes

- To accommodate changed lane capacity, vehicles either need to change routes (diversion) or expect slower travel times
- AM Rush Hour Northbound
 - 20% diversion of traffic would minimize Northbound back-ups at St. Clair
 - 25% diversion of traffic would maintain the existing travel times (worst case scenario)
 - Approximately 400 vehicles
- PM Rush Hour Southbound
 - 0% diversion of traffic would maintain similar operations
 - 15% diversion of traffic would maintain the existing travel times (worst case scenario)
 - Approximately 200 vehicles



Travel Pattern Data

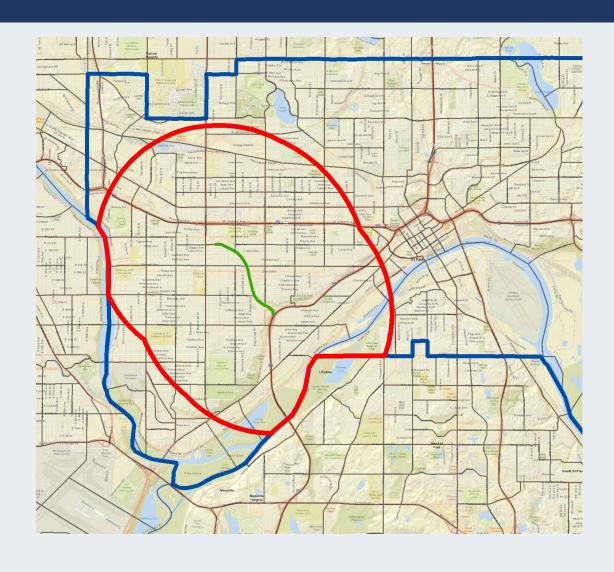
 The vehicle data used to evaluate existing travel patterns was collected from January to December, 2018

 The Metropolitan Council's "Activity Based Travel Demand Model" was used to analyze how changes to Ayd Mill Road would change travel patterns

 It is expected that diversion of vehicles will primarily be limited to the AM and PM rush hours



Existing Travel Patterns of Ayd Mill Road Users

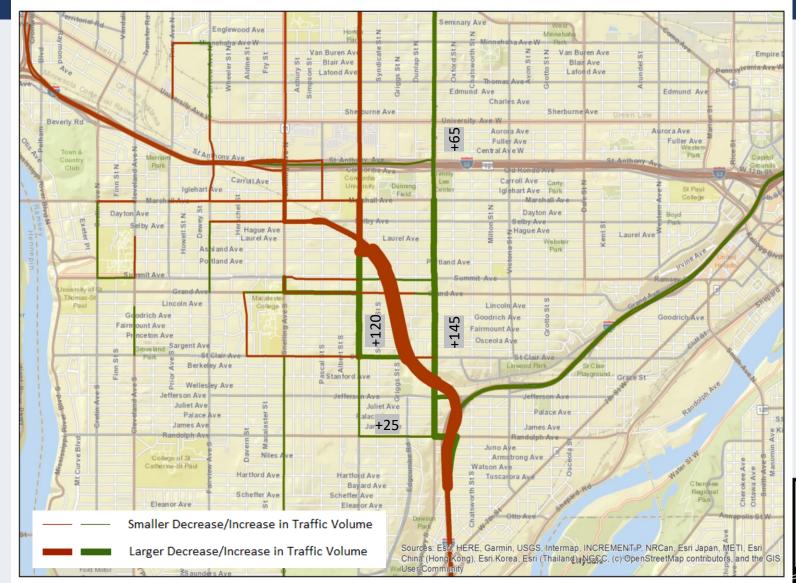


- 75% of existing trips either start or end in Saint Paul
 - 50% of trips start or end within 2 miles of Ayd Mill Road
 - 10% of trips both start and end within
 2 miles of Ayd Mill Road
 - 15% start or end elsewhere in Saint
 Paul
- 25% of existing trips start and end outside of Saint Paul



Estimated AM Rush Hour Diversion Patterns

- To maintain existing travel times on Ayd Mill Road, a diversion of up to 400 trips is required in the AM rush hour
- Hamline Avenue and Lexington Parkway are likely diversion routes
- About 100 trips currently using Ayd Mill Road are expected to divert completely out of the area in the AM rush hour





Estimated PM Rush Hour Diversion Patterns

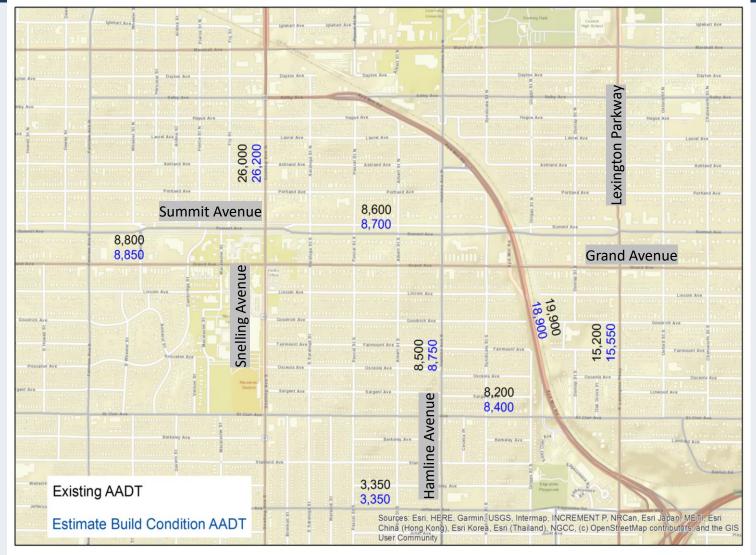
- To maintain existing travel times on Ayd Mill Road, a diversion of up to 200 trips is required in the PM rush hour
- Hamline Avenue and Summit Avenue are likely diversion routes
- About 50 trips currently using Ayd Mill Road are expected to divert completely out of the area in the PM rush hour





Daily Travel Volumes – Existing & Estimated

- Increases in vehicle numbers are anticipated on some roads because of traffic diversion from a 3-lane Ayd Mill Road
- The current Annual Average Daily Traffic (AADT) on roads and estimated daily traffic volumes with a 3-lane Ayd Mill Road are shown on the map





Weekday Gameday Volumes Northbound Traffic

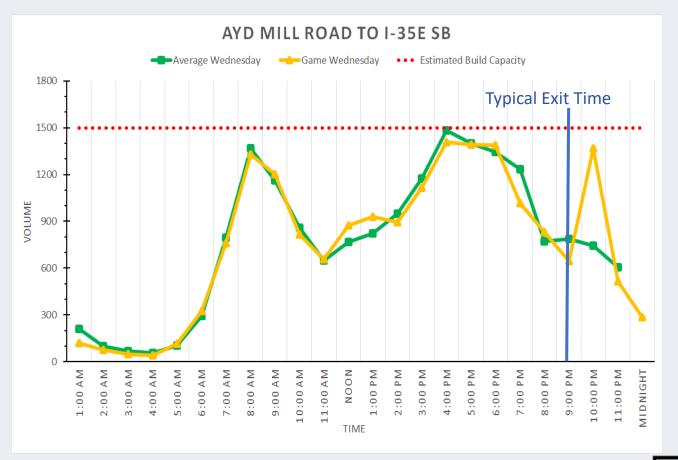
- Vehicle data on days with and without games at Allianz field was collected in 2019
- PM peak volume on game days is slightly later and marginally higher than on non-game days
- Neither the average weekday nor the game day PM peak exceeds the AM Northbound rush hour



Weekday Gameday Volumes Southbound Traffic

 Traffic departing after games creates a second, later southbound peak

 The second evening peak has a lower traffic volume than a regular, weeknight PM rush hour

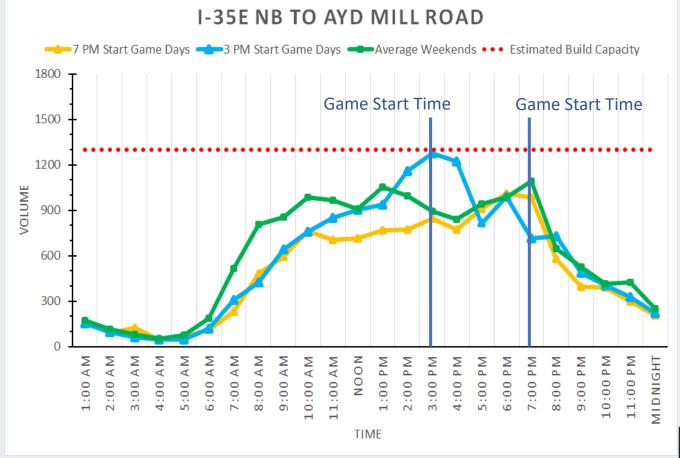




Weekend Gameday Volumes Northbound Traffic

 Weekend games are sometimes held at 3 PM and sometimes at 7 PM

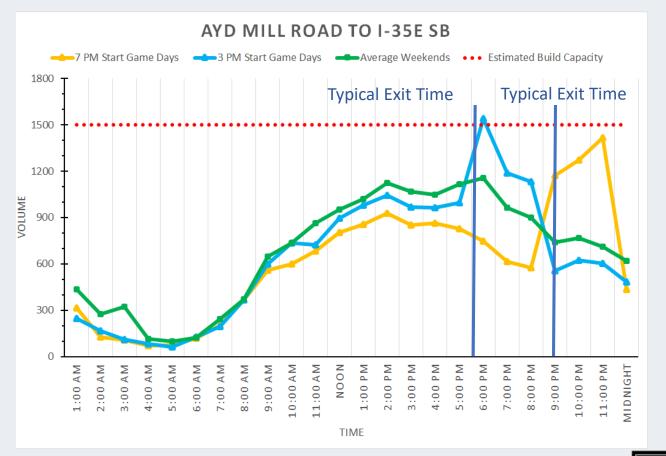
 Neither game time results in northbound traffic volumes that exceed anticipated capacity





Weekend Gameday Volumes Southbound Traffic

- Traffic at the conclusion of both 3 PM and 7 PM weekend games creates larger peaks than nongame days
- These peaks exceed expected capacity and may result in some diversion away from Ayd Mill Road





Traffic Mitigation Toolbox: Potential Mitigation Strategies

Based on anticipated Ayd Mill Road traffic diversion patterns, Lexington and Hamline are expected to see some increase in rush hour traffic. These roadways will be monitored and, if appropriate, the following mitigation strategies could be considered:

- Traffic Signal Retiming Adjustments
- Change Lane Configuration at Intersections
- Restrict Turning Movements at Intersections During Peak Periods
- Parking Removals or Time of Day Parking Restrictions
- Traffic Control Changes at Intersections
- Increase Multi-Modal Options
- Speed Enforcement



Next steps

- Pending City Council approval, Public Works will move forward with the 3-lane concept with a multi-use trail being constructed along the east side of Ayd Mill Road
- Additional information posted on website including FAQs
 - Week of April 6
- City Council meeting
 - April 22
- Estimated project timeline
 - Project out for bid early June
 - Work begins August
 - Road closed August to late Fall 2020

